**Osteoporosis**

**Osteoporosis is a condition in which bone density is lost and deteriorates it can cause the bones to become fragile and porous. It can be described as being spongy and squishy normal bone is thick and dense.**

**Signs and Symptoms:**

**Osteoporosis is a silent disease, it does not usually produce symptoms, until a broken bone causes pain. Unplanned fractures, especially in the vertebrae of the mid to lower thoracic spine, and loss of height are the most common signs.**

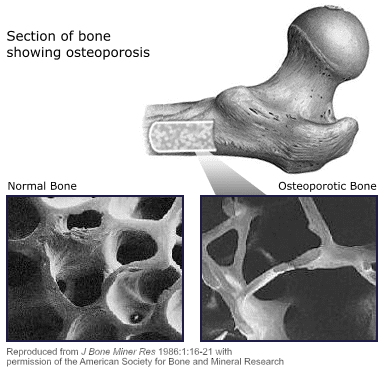
**Osteoporosis is the most common metabolic bone disease. It is the imbalance between the breakdown of old bone tissue and the production of new bone. Metabolic bone diseases originate from hormonal or dietary factors or disuse, but trauma may also lead to this condition. It can also be caused by radiation treatments, malabsorption, smoking, immobility and Rheumatoid arthritis. It can also result from medications and menopause.**

**Diagnosis:**

**Patients with unpredictable bone fractures are screened through radiographic testing. When osteoporosis is detected, patients are further evaluated for hormone imbalances , kidney disease, diet inadequacy, intestinal malabsorption, and use of certain medications. Diagnosis is based on results of blood serum studies, radiographic films, urinalysis, C.T. scan, and bone scan. The most accurate is a Dexascan.**

**Treatment:**

**Increase dietary intake of calcium, calcium carbonate, phosphate supplements, vitamins and vitamin D, estrogen replacement. Exercise can help slow the loss of calcium, such as walking, swimming, and riding a stationary bicycle, and physical therapy. To relieve pain muscle relaxers and pain medications are prescribed.**

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**Comparison of normal bone to bone with osteoporosis**